

Overview

Australia’s almond industry is entering a renewal phase, with many orchards due for replanting over the next decade. Expansion to date has mainly relied on regions below the Barmah Choke, where water delivery constraints and high costs now limit growth. This project explores the potential to diversify production into new regions above the Choke, where water reliability, land availability and lower investment costs can support sustainable industry expansion.

The Case for Exploring New Regions

Over the past two decades, most almond expansion has occurred below the Barmah Choke, taking advantage of fertile soils and established irrigation networks.

However, these regions now face increasing delivery constraints, higher water costs and limited space for further development.

At the same time, global demand for almonds remains strong, and around 40 % of orchards will require replanting within 10 years.

Diversifying into new regions above the Choke offers the opportunity to spread water risk, access more affordable land and water, and build long-term resilience across the southern Murray–Darling Basin.

Key considerations:

- Water delivery limits below the Choke reduce reliability and increase costs.
- Suitable land and climate remain available above the Choke.
- New regions provide scalability and first-mover advantages.
- Diversification supports a more balanced and resilient industry.

Water Availability and Demand (Above/Below Choke)

Aither’s 2022 assessment shows that water availability across the southern Murray–Darling Basin varies significantly above and below the Barmah Choke.

Regions above the Choke maintain stronger reliability and larger average-year allocations, while below the Choke, water availability falls sharply under dry conditions.

As permanent horticultural plantings continue to mature, demand for secure water is expected to increase, particularly in the lower Murray.

Balancing future development between regions will be essential to maintaining supply reliability and supporting industry growth.

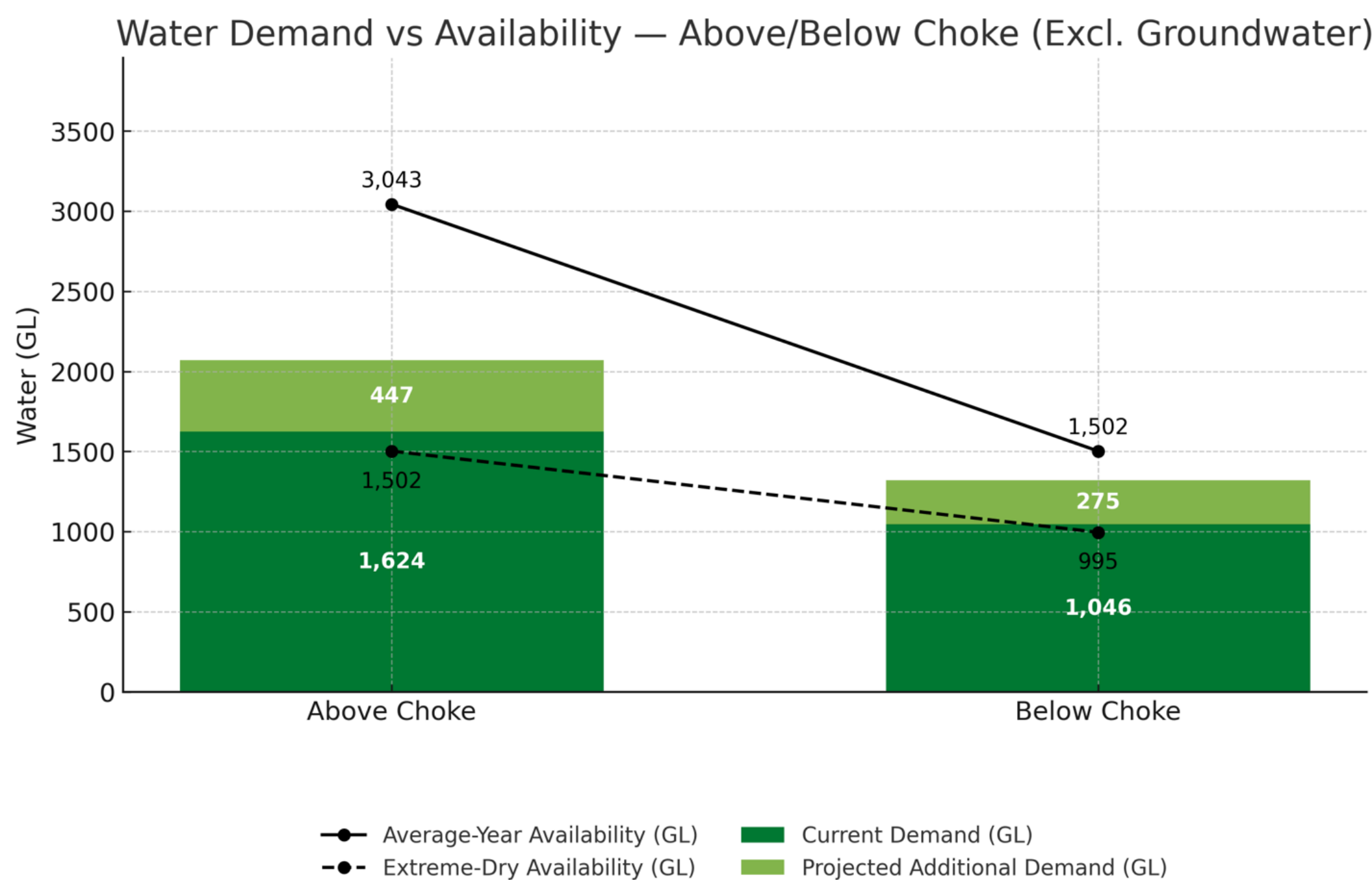


Figure: Water demand and availability above and below the Barmah Choke (Aither, 2022). Current and projected permanent horticultural demand are compared with average and extreme-dry year surface-water availability, showing increasing pressure on lower-Murray supply reliability.

Sources & Acknowledgements

Sources: Aither (2022) Water Supply and Demand in the Southern Murray–Darling Basin – 2022 Update; NSW Department of Primary Industries (2016) An Objective Basis for Temperate Nut Industries Expansion – Almond, Walnut and Pecan (Hort Innovation Project NT14006); Bendigo Bank (2024) Farmland Values Report; Elders (2025) Water Market Outlook.

Acknowledgements: Almond Board of Australia – ABA Leadership Program 2025.

Development Hectare: The Investment Difference

A “development hectare” in this analysis represents the combined cost of land and water required to establish one hectare of new almond orchard, assuming 12 ML/ha of high-security surface water.

It does not include orchard development costs such as trees, irrigation infrastructure, or earthworks.

Regional variations in land value and water pricing create large differences in total investment requirements.

Areas below the Barmah Choke generally face higher entry costs due to strong competition for high-security water and limited availability, while regions above the Choke offer lower establishment costs and greater room for expansion.

Assumptions:

- 12 ML/ha high-security water use
- Land values from Bendigo Bank (2024 Land Values report)
- Water pricing from Elders (2025 Water Market Outlook)
- Figures reflect land + water only (no orchard development costs)

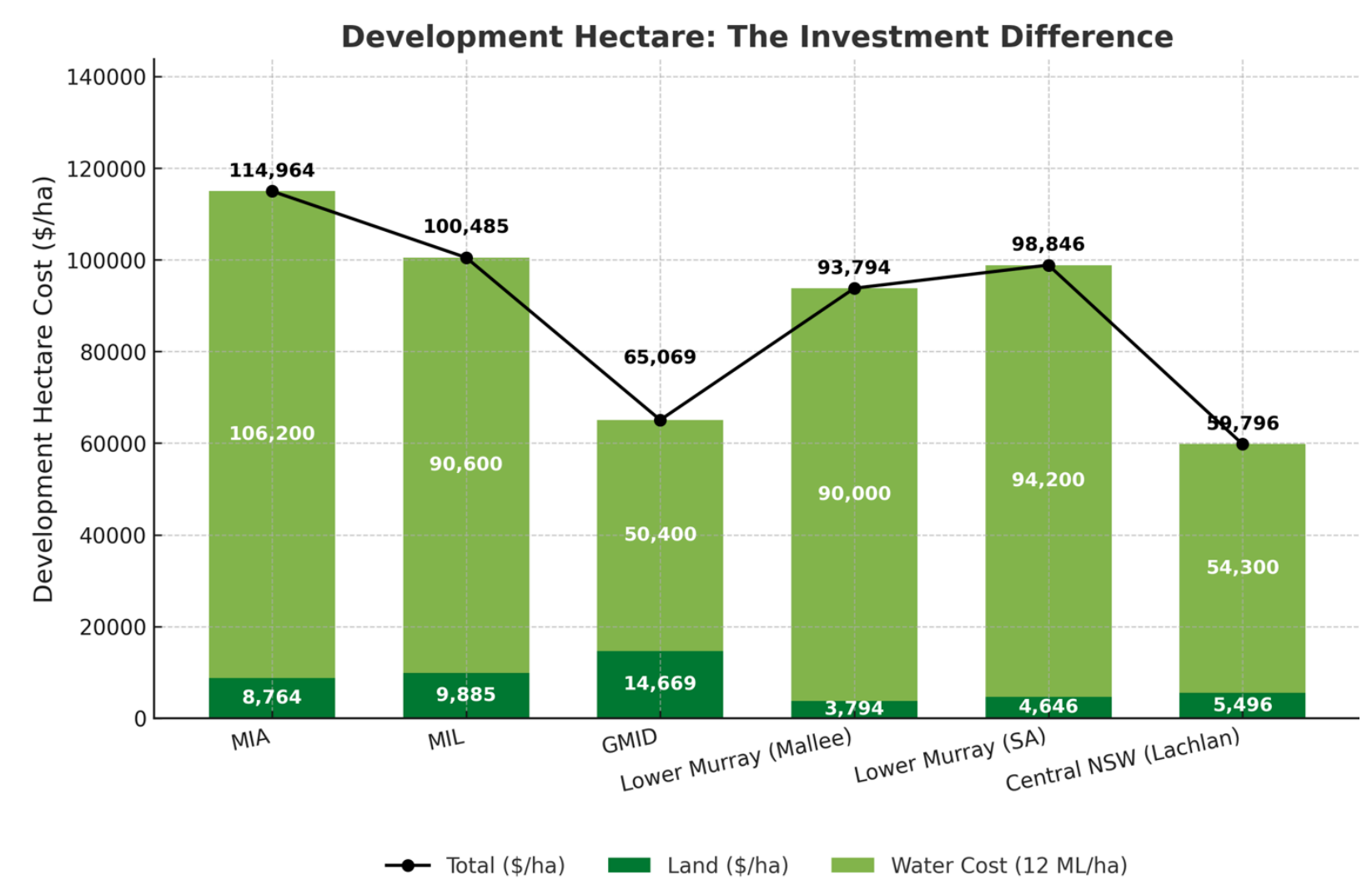


Figure: Indicative comparison of land and water costs per hectare across key almond-growing regions.

Almond Industry Expansion: The Opportunity

Global almond demand continues to grow, supported by strong consumption in Asia and emerging export markets.

Australia remains well placed to supply premium almonds, with industry forecasts showing continued growth over the coming decade.

Ongoing investment in research and innovation — including self-fertile varieties, improved water productivity, and new processing technology — will support this expansion and help manage future climate and resource constraints.

The DPI bioclimatology model highlights several new regions across the southern Murray–Darling Basin with suitable climate, reliable water access, and available land to support future development.

Key Insights:

- Global demand and exports are expected to increase over the coming decade.
- Productivity gains and new technologies are improving water-use efficiency.
- Multiple regions remain climatically suited for almonds under future scenarios.
- Strategic diversification will strengthen industry resilience and long-term growth.

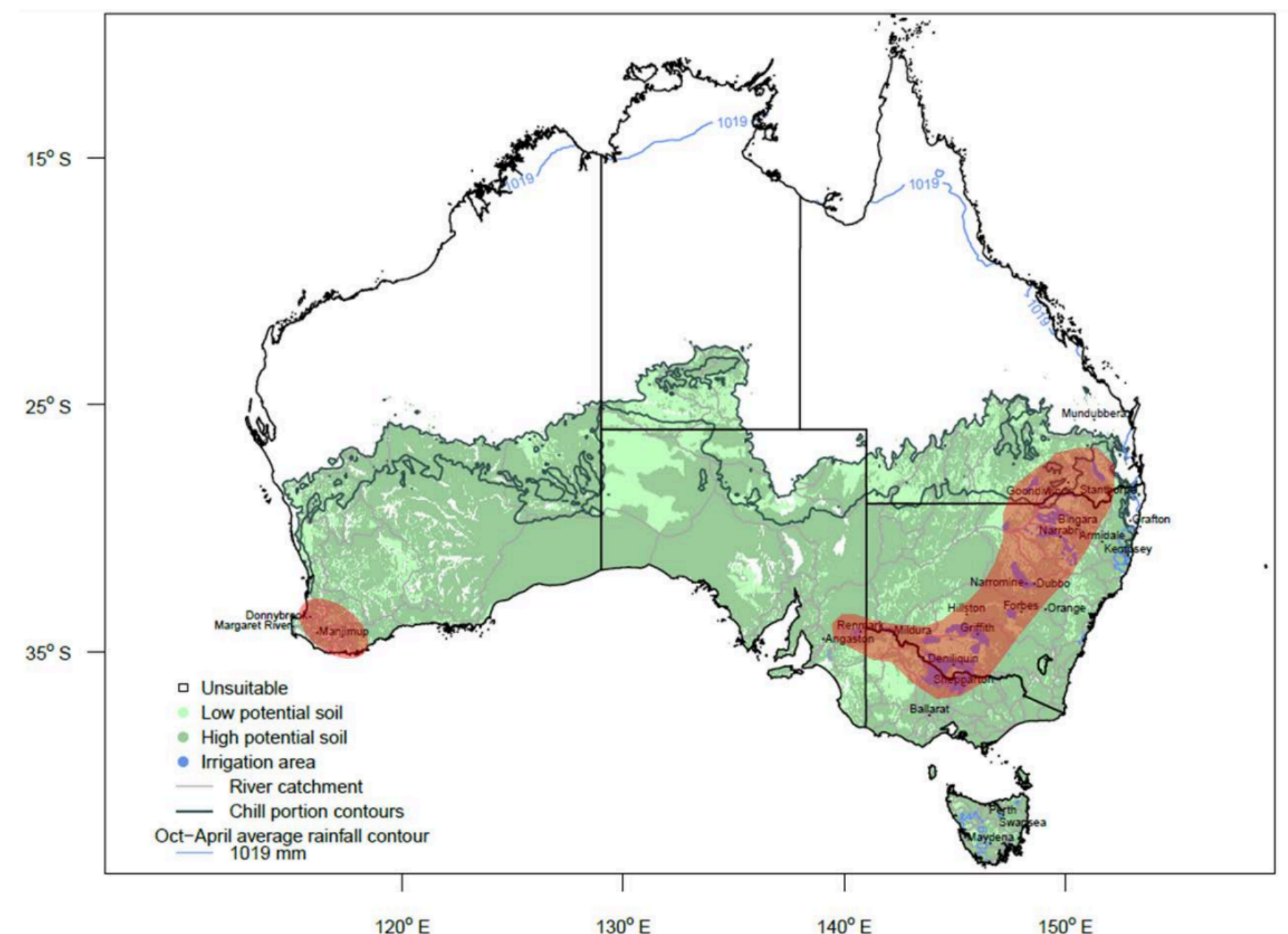


Figure: Almond industry bioclimatology model (NSW DPI, 2016). Red shading indicates regions most suited to future almond expansion.